

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number
WO 2004/052918 A2

- (51) International Patent Classification⁷: **C07K** NY 10027 (US). DENG, Shi-Xian [CN/US]; 33D Hillside Terrace, White Plains, NY 10601 (US).
- (21) International Application Number: PCT/US2003/039207 (74) Agent: **WHITE, John, P.**; Cooper & Dunahm LLP, 1185 Avenue of the Americas, New York, NY 10036 (US).
- (22) International Filing Date: 8 December 2003 (08.12.2003) (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/431,897 9 December 2002 (09.12.2002) US
- (63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application: US 60/431,897 (CON) Filed on 9 December 2002 (09.12.2002)
- (71) Applicant (*for all designated States except US*): **THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK** [US/US]; West 116th Street and Broadway, New York, NY 10027 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): **LANDRY, Donald, W.** [US/US]; 29 Claremont Avenue Apt. 2-S, New York,
- (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— *without international search report and to be republished upon receipt of that report*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: PEPTIDES AND METHODS FOR DEACTIVATION OF ORGANOPHOSPHORUS-BASED NERVE AGENTS AND INSECTICIDES

(57) Abstract: This invention provides methods and peptides for the inactivation of organophosphorus-based insecticides and chemical warfare agents. The instant methods include peptide screening methods, peptides and peptide libraries, related compositions of matter, articles of manufacture, and methods for prophylaxis, treatment, decontamination and detection.